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**COMMONWEALTH OF VIRGINIA OPERATING PERMIT
STATIONARY SOURCE PERMIT TO OPERATE**

In compliance with the Federal Clean Air Act and the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution,

Twin County Regional Hospital
200 Hospital Drive
Galax, Virginia 24333
Registration No.: 11062
AIRS ID No.: 51-035-0064

is authorized to operate

various fuel-burning equipment

located at

200 Hospital Drive in Galax, Virginia

in accordance with the Conditions of this permit.

Approved on July 21, 1995 (as amended April 26, 2000, February 14, 2001, and February 10, 2005)

Robert G. Burnley
Director

Permit consists of 8 pages.
Permit Conditions 1 to 20.

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PERMIT CONDITIONS - the regulatory reference or authority for each condition is listed in parentheses () after each condition.

APPLICATION

1. Except as specified in this permit, the permitted facility is to be operated as represented in the permit applications dated December 23, 2004, April 19, 1995 and June 20, 1989, including additional information submitted February 1, 2005, and amendment sheets dated July 31, 1989, August 1, 1989, and August 10, 1989. Any changes in the permit application specifications or any existing facilities which alter the impact of the facility on air quality may require a permit.
(9 VAC 5-80-830)

PROCESS REQUIREMENTS

2. **Equipment List** - Equipment to be operated at this facility consists of:

- One Superior oil-fired boiler rated at 14.6 million Btu/hr heat input capacity;
- Two Caterpillar emergency generators rated at 485 HP output each; and
- One Cleaver-Brooks model CB 100-238-150ST oil-fired boiler, rated at 9.96 million Btu/hr heat input capacity.

Registered equipment to be operated at this facility consists of:

- One Caterpillar emergency generator rated at 1098 HP output.

OPERATING/EMISSION LIMITATIONS

3. **Fuel** – The approved fuel for the Superior boiler, the Cleaver-Brooks boiler, and emergency generators is distillate oil. Distillate oil is defined as fuel oil that meets the specifications for fuel oil numbers 1 and 2 under the American Society of Testing and Materials, ASTM D396-78 “Standard Specification for Fuel Oils”. A change in fuels may require a permit to modify and operate.
(9 VAC 5-80-850)
4. **Fuel** – The maximum sulfur content of the distillate oil to be burned by the Superior boiler, the Cleaver-Brooks boiler, and the two 485 HP Caterpillar emergency generators shall not exceed 0.5 percent by weight per shipment. The permittee shall obtain a certification from the fuel supplier. Each fuel supplier certification shall include the following:
 - a. The name of the fuel supplier,

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- b. The date on which the fuel was received,
 - c. The sulfur content of the oil,
 - d. The method used to determine the sulfur content of the oil,
 - e. The volume of distillate oil delivered in the shipment, and
 - f. A statement that the oil complies with the American Society for Testing and Materials specifications for fuel oil numbers 1 and 2.
(9 VAC 5-80-850 and 9 VAC 5-80-900)
5. **Usage** - The Superior boiler shall consume no more than 150,000 gallons of distillate oil per year, calculated monthly as the sum of each consecutive 12 month period.
(9 VAC 5-80-850)
6. **Usage** - The two 485 HP Caterpillar emergency generators shall consume no more than 96,990 gallons of distillate oil per year, each, calculated monthly as the sum of each consecutive 12 month period.
(9 VAC 5-80-850)
7. **Usage** - The Cleaver-Brooks boiler shall consume no more than 623,100 gallons of distillate oil per year, calculated monthly as the sum of each consecutive 12 month period.
(9 VAC 5-80-850)
8. **Emission Limits** – Emissions from the operation of the Superior boiler shall not exceed the limits specified below:

Particulate Matter	0.21 lbs/hr	0.15 tons/yr
PM-10	0.11 lbs/hr	0.08 tons/yr
Sulfur Dioxide	7.49 lbs/hr	5.39 tons/yr
Nitrogen Oxides (as NO ₂)	2.09 lbs/hr	1.50 tons/yr
Carbon Monoxide	0.52 lbs/hr	0.38 tons/yr

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Volatile Organic Compounds	0.02 lbs/hr	0.02 tons/yr
Particulate as Beryllium	3.7×10^{-5} lbs/hr	2.6×10^{-5} tons/yr
VOC as Formaldehyde (9 VAC 5-80-850)	0.017 lbs/hr	0.012 tons/yr

9. **Emission Limits** – Emissions from the operation of each of the two 485 HP Caterpillar emergency generators shall not exceed the limits specified below:

Particulate Matter	1.08 lbs/hr	1.62 tons/yr
PM-10	1.08 lbs/hr	1.62 tons/yr
Sulfur Dioxide	1.00 lbs/hr	1.51 tons/yr
Nitrogen Oxides (as NO ₂)	15.08 lbs/hr	22.74 tons/yr
Carbon Monoxide	3.28 lbs/hr	4.95 tons/yr
Volatile Organic Compounds	1.03 lbs/hr	1.56 tons/yr
VOC as Benzene	4.2×10^{-3} lbs/hr	6.3×10^{-3} tons/yr
VOC as Toluene	1.8×10^{-3} lbs/hr	2.8×10^{-3} tons/yr
VOC as Xylene	1.3×10^{-3} lbs/hr	1.9×10^{-3} tons/yr
VOC as Formaldehyde	5.3×10^{-3} lbs/hr	8×10^{-3} tons/yr
VOC as Acetaldehyde	3.5×10^{-3} lbs/hr	5.2×10^{-3} tons/yr
VOC as Acrolein (9 VAC 5-80-850)	4.2×10^{-4} lbs/hr	6.3×10^{-4} tons/yr

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10. **Emission Limits** – Emissions from the operation of the Cleaver-Brooks boiler shall not exceed the limits specified below:

<u>Pollutant</u>	<u>lb/hr</u>	<u>T/yr</u>
SO ₂	5.05	22.12
NO _x	1.42	6.22
CO	0.36	1.58
PM/PM10 (9 VAC 5-80-850)	0.14	0.61

11. **Visible Emission Limit** - Visible emissions from the Superior boiler and two 485 HP Caterpillar emergency generators shall not exceed 20 percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A), except during one six-minute period in any one hour in which visible emissions shall not exceed 60 percent opacity. This condition applies at all times except during startup, shutdown, and malfunction.
(9 VAC 5-170-160 and 9 VAC 5-40-20)
12. **Visible Emission Limit** - Visible emissions from the Cleaver-Brooks boiler shall not exceed 20 percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A), except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity. This condition applies at all times except during startup, shutdown, and malfunction.
(9 VAC 5-170-160 and 9 VAC 5-50-80)

RECORDS

13. **On Site Records** - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Southwest Regional Office. These records shall include, but are not limited to:
- The monthly throughput of distillate oil for each boiler and the two emergency generators,
 - All fuel supplier certifications, and
 - Records of all oil shipment purchased indicating the supplier, volume of the shipment, and date on which the shipment was made, and all subsequent oil analyses.

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These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-900)

GENERAL CONDITIONS

14. Right of Entry - The permittee shall allow authorized local, state, and federal representatives, upon the presentation of credentials:

- a. To enter upon the permittee's premises on which the facility is located or in which any records are required to be kept under the terms and conditions of this permit;
- b. To have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit or the State Air Pollution Control Board Regulations;
- c. To inspect at reasonable times any facility, equipment, or process subject to the terms and conditions of this permit or the State Air Pollution Control Board Regulations; and
- d. To sample or test at reasonable times.

For purposes of this condition, the time for inspection shall be deemed reasonable during regular business hours or whenever the facility is in operation. Nothing contained herein shall make an inspection time unreasonable during an emergency.

(9 VAC 5-170-160)

15. Maintenance/Operating Procedures - The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:

- a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
- b. Maintain an inventory of spare parts.
- c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
- d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

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Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.

(9 VAC 5-80-900 and 9 VAC 5-40-20)

- 16. Notification for Facility or Control Equipment Malfunction** - The permittee shall furnish notification to the Director, Southwest Regional Office of malfunctions of the affected facility or related air pollution control equipment that may cause excess emissions for more than one hour, by facsimile transmission, telephone or telegraph. Such notification shall be made as soon as practicable but not later than four daytime business hours after the malfunction is discovered. The permittee shall provide a written statement giving all pertinent facts, including the estimated duration of the breakdown, within 14 days of the occurrence. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the permittee shall notify Southwest Regional Office in writing.

(9 VAC 5-20-180 C)

- 17. Permit Suspension/Revocation** - This permit may be suspended or revoked if the permittee:

- a. Knowingly makes material misstatements in the application for this permit or any amendments to it;
- b. Fails to comply with the conditions of this permit;
- c. Fails to comply with any emission standards applicable to the equipment listed in Condition 2;
- d. Causes emissions from this facility which result in violations of, or interferes with the attainment and maintenance of, any ambient air quality standard;
- e. Fails to operate this facility in conformance with any applicable control strategy, including any emission standards or emission limitations, in the State Implementation Plan in effect on the date that the application for this permit is submitted;
- f. Fails to operate this facility in accordance with the application for this permit or any amendments to it; or

- g. Allows the permit to become invalid.

(9 VAC 5-80-1010)

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18. **Change of Ownership** - In the case of a transfer of ownership of a stationary source, the new owner shall abide by any current permit issued to the previous owner. The new owner shall notify the Southwest Regional Office of the change of ownership within 30 days of the transfer.
(9 VAC 5-80-940)
19. **Registration/Update** - Annual requirements to fulfill legal obligations to maintain current stationary source emissions data will necessitate a prompt response by the permittee to requests by the DEQ or the Board for information to include, as appropriate: process and production data; changes in control equipment; and operating schedules. Such requests for information from the DEQ will either be in writing or by personal contact. The availability of information submitted to the DEQ or the Board will be governed by applicable provisions of the Freedom of Information Act, §§ 2.1-340 through 2.1-348 of the Code of Virginia, § 10.1-1314 (addressing information provided to the Board) of the Code of Virginia, and 9 VAC 5-170-60 of the State Air Pollution Control Board Regulations. Information provided to federal officials is subject to appropriate federal law and regulations governing confidentiality of such information.
(9 VAC 5-80-900)
20. **Permit Copy** - The permittee shall keep a copy of this permit on the premises of the facility to which it applies.
(9 VAC 5-80-860)